



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

FEB 23 2017

REPLY TO THE ATTENTION OF:

WN-15J

Phil Argiroff, Chief  
Permits Section  
Water Resources Division  
Michigan Department of Environmental Quality  
525 West Allegan  
Post Office Box 30473  
Lansing, Michigan 48909-7973

Re: U.S. Environmental Protection Agency Review of the Proposed NPDES Permit for Aquila Resources Inc. – Back Forty Project MI0059945

Dear Mr. Argiroff:

The U.S. Environmental Protection Agency (EPA) has reviewed the Michigan Department of Environmental Quality's (MDEQ) Proposed National Pollutant Discharge Elimination System (NPDES) permit and MDEQ's response to comments for the proposed Aquila Resources, Inc. – Back Forty project that we received on February 1, 2017.

EPA appreciates the revisions MDEQ has made to the permit in response to our previous comments with regard to inclusion of mussel testing and ambient monitoring requirements and are providing the following additional comments.

***Addition of mussel species to Part I, Section A.1.i. Acute Toxicity Final Requirements:***

EPA is pleased to see that MDEQ added the mussel species *Amblema plicata* or a similarly sensitive species to the permit's Acute Toxicity Testing requirements. Please feel free to contact us if you would like to discuss the technical details associated with these mussel testing requirements.

***Reopener Clause at Part I, Section A.1.j.***

EPA is pleased to see that MDEQ included ambient monitoring requirements as a part of its "reopener clause" consistent with federal regulations related to monitoring and reporting at 40 C.F.R. § 122.44(i), § 122.48(b) and § 122.48(c). EPA believes the requirement for the permittee to collect and report ambient monitoring data is critically important. This information will allow MDEQ to evaluate potential effects on water quality from the project, timely identify and evaluate any potential for unauthorized discharges, and inform future permitting decisions. Ambient monitoring is especially important for a new proposed mining facility, as there is uncertainty regarding the potential migration of pollutants to surface waters from these types of facilities.

Below are EPA's recommendations regarding the "reopener clause" language that MDEQ added to the permit (including edits of the specific language in ~~strikeout~~/underline) in order to improve the clarity, enforceability, and transparency of the requirements.

1. The reopener clause refers to ambient monitoring requirements contained in the Part 632 mining permit. We reviewed specifically Special Permit Condition Paragraph K (Environmental and Facility Monitoring) of the permit and Appendix G of the permit application referenced in that section, including Figure 5-1 of the appendix that depicts some of the sampling locations where ambient monitoring will be required under the mining permit. We were unable to locate other figures, which are referenced in Condition K of the permit (such as "Figure 63-1 of the Response, June 2016"). Condition K.3 of the Part 632 mining permit states that "the permittee shall monitor surface water quality quarterly..." and references a "Table 2-1 of the Environmental Monitoring Plan."
  - EPA strongly recommends that a comprehensive figure showing all of the ambient monitoring locations be included in a modified fact sheet for the NPDES permit, or added to the permit itself, and that an appropriate reference to it be added to the reopener clause. EPA also strongly recommends that the permit specifically reference the requirements for monitoring included in Table 2-1.
2. Condition K of the mining permit indicates that the permittee will submit annual reports to MDEQ for ambient monitoring. The mining permit does not indicate the format that the report will take nor how it will be made available to the public. We recommend that the reporting frequency be aligned with the monitoring frequency and that, accordingly, reporting should be on a quarterly basis.
  - EPA recommends that MDEQ require the permittee, by revising the reopener clause, to report the results of the ambient monitoring to MDEQ quarterly via the MiWaters website so that this information would be available to the public in a timely manner.
3. Condition K.4.c of the mining permit states: "current ambient monitoring stations selected by the company should be revisited on a periodic basis over the life of the discharge. To reduce the effects of seasonal variability, ambient monitoring should be conducted in the same season throughout the life of the facility operations." This language seems to imply that the permittee would not necessarily be required to return to all of the ambient monitoring stations each quarter.
  - EPA recommends that the NPDES permit provide additional clarity on this matter so that it is clear that the permittee is required to visit all of the monitoring locations quarterly.

Below are EPA's recommended edits to the Reopener Clause.

j. Reopener Clause

As a condition of this permit, the permittee shall conduct ambient surface water monitoring as detailed in the Part 632 mining permit at Special Permit Conditions Paragraph K. Ambient monitoring locations are provided in the map enclosed with the NPDES permit fact sheet. The

permittee shall conduct quarterly monitoring at each location for the parameters listed in Table 2.1 of the Environmental Monitoring Plan submitted with the Part 632 mining permit application and also provided in the NPDES permit fact sheet. The data shall be submitted on a quarterly basis via the Department's MiWaters system. The MiWaters website is located at <https://miwaters.deq.state.mi.us>. The Department will evaluate the results of the quarterly ambient surface water monitoring required under the Part 632 mining permit and determine if any pollutants that are not identified in the NPDES permit application, or contained in the permit, are found to cause adverse impact to water quality or if any adjustments need to be made to the requirements based on the results of the monitoring. To protect the receiving waters with applicable water quality standards, this permit may be modified in accordance with applicable laws and rules.

When the Final Permit is prepared, please forward a copy to [r5npdes@epa.gov](mailto:r5npdes@epa.gov). Please include the permit number, the facility name, and the words "Final Permit" in the message title. If you have any technical questions related to EPA's review, please contact Krista McKim at (312) 353-8270 or at [mckim.krista@epa.gov](mailto:mckim.krista@epa.gov).

Thank you for cooperation during the review process.

Sincerely,



Kevin M. Pierard, Chief  
NPDES Programs Branch

cc: Sylvia Heaton, MDEQ, electronically  
Joe Maki, MDEQ, electronically